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# Remarks and Arguments

Claims 31-63 are currently pending in the application. In response to the present office action, Applicants have amended claim 31 and have, without prejudice, cancelled claims 51 and 52. Page 20 of the application presently on file has been amended to correct the salt of the end products. The reactant "Ms<sub>2</sub>O" when used as a reactant in the scheme to produce MES121 and compounds thereafter in the scheme, and compounds 143 and 156, provides "MsOH" salts and not, as originally given, "TsOH". This was an obvious typographical error. By these amendments, Applicants submit that *no new matter has been added*.

#### Priority claim

The Examiner states that a certified copy of the priority document is not part of the application currently on file and therefore the priority date is considered to be the actual U.S. filing date (02/01/2006) of the application. In response, Applicants respectfully direct the Examiner's attention to a Notice of Acceptance of the current application under 35 U.S.C. 371 and 37 C.F.R. 1.497 mailed by the Office on 06/09/2006. The Notice states that the priority documents were received by the Office on 02/01/2006. Thus, it is respectfully submitted that Applicants have satisfied the conditions for claiming priority.

# Claim Rejections Under 35 USC § 102

The Examiner has rejected claims 31-36, 38-40, 43-46, 48-49 and 52 has been anticipated by Davis et al (U.S. Patent number 5,057,614). While in no way acquiescing through the Examiner's position and merely to expedite allowance of the application, Applicants have amended claim 31 to include with the proviso that "when X¹-X³ are all C, R¹-R³ are all H, X¹ is CH, X⁵ is C, R⁵ is H, X¹0 is CH, X⁶-X⁶ are all C, R⁶-R⁶ are all H, and X⁰ is CH, then R⁴ is not CH₃. By this amendment, claim 31, and claims dependent therefrom, is not anticipated by Davis et al. The Examiner is respectfully requested to reconsider his position and remove this rejection.

#### Double patenting

The Examiner has rejected claim 50 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6 of U.S. Patent number 7,129,250. Furthermore, the Examiner has rejected claim 51 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim.

7 of U.S. Patent number 7,129,250. While in no way acquiescing to the Examiner's position and merely to expedite allowance of the application, Applicants have cancelled claims 50 and 51, without prejudice, thereby rendering the rejection moot.

# Claim Rejections Under 35 USC § 112

The Examiner has rejected claims 31-36, 38-40, 42-46 and 48-52 as failing to comply with the written description requirement. In particular, the Examiner states that there is improper IUPAC nomenclature which would create ambiguity as to what is actually possessed. In response, Applicants submit the following Table to help clarify the IUPAC names in terms of their corresponding chemical structure, as requested by the Examiner.

| Compound number | IUPAC name   | Compound structure |
|-----------------|--|--------------------|
| 121             | 3-(1-(3-hydroxypropyl)-1H-<br>indol-3-yl)-4-(1H-indol-1-yl)-<br>1H-pyrrole-2,5-dione                   |                    |
|                 |  | но                 |
| 124             | 3-(5-(benzyloxy)-1-(3-<br>hydroxypropyl)-1H-indol-3-<br>yl)-4-(1H-indol-1-yl)-1H-<br>pyrrole-2,5-dione | Ph O HO            |
| 125             | 3-(1-(3-hydroxypropyl)-1H-<br>indol-3-yl)-4-(3-methyl-1H-<br>indol-1-yl)-1H-pyrrole-2,5-<br>dione      | HO HO              |

| Compound number | IUPAC name  | Compound structure |
|-----------------|---|--------------------|
| 126             | 3-(5-(benzyloxy)-1H-indol-1-yl)-4-(1-(3-hydroxypropyl)-1H-indol-3-yl)-1H-pyrrole-2,5-dione                      | O H O Ph           |
| 127             | 3-(1-(3-hydroxypropyl)-1H-<br>indol-3-yl)-4-(2-methyl-1H-<br>indol-1-yl)-1H-pyrrole-2,5-<br>dione               | HO HO              |
| 128             | 3-(1H-benzo[d]imidazol-1-<br>yl)-4-(1-(3-hydroxypropyl)-<br>1H-indol-3-yl)-1H-pyrrole-<br>2,5-dione             | HO HO              |
| 129             | 3-(5-(benzyloxy)-1-(3-<br>hydroxypropyl)-1H-indol-3-<br>yl)-4-(3-methyl-1H-indol-1-<br>yl)-1H-pyrrole-2,5-dione | Ph O HO            |
| 130             | 3-(1-(3-hydroxypropyl)-1H-<br>indol-3-yl)-4-(1H-pyrrolo[2,3-<br>b]pyridin-1-yl)-1H-pyrrole-<br>2,5-dione        | HO N               |

| Compound number | IUPAC name  | Compound structure                       |
|-----------------|---|--|
| 131             | 3-(5-(benzyloxy)-1-(3-<br>hydroxypropyl)-1H-indol-3-<br>yl)-4-(2-methyl-1H-indol-1-<br>yl)-1H-pyrrole-2,5-dione | Ph O HO                                  |
| 132             | 3-(5-fluoro-1H-indol-1-yl)-4-<br>(1-(3-hydroxypropyl)-1H-<br>indol-3-yl)-1H-pyrrole-2,5-<br>dione               | HO F.                                    |
| 133             | 3-(1-(3-<br>(dimethylamino)propyl)-1H-<br>indol-3-yl)-4-(1H-indol-1-yl)-<br>1H-pyrrole-2,5-dione                | (CH <sub>3</sub> ) <sub>2</sub> N        |
| 136             | 3-(5-(benzyloxy)-1-(3-<br>(dimethylamino)propyl)-1H-<br>indol-3-yl)-4-(1H-indol-1-yl)-<br>1H-pyrrole-2,5-dione  | Ph O N O N O N O N O N O N O N O N O N O |
| 137             | 3-(1-(3-<br>(dimethylamino)propyl)-1H-<br>indol-3-yl)-4-(3-methyl-1H-<br>indol-1-yl)-1H-pyrrole-2,5-<br>dione   | (CH <sub>3</sub> ) <sub>2</sub> N        |

| Compound      | IUPAC name  | Compound structure                       |
|---------------|---|--|
| number<br>138 | 3-(5-(benzyloxy)-1H-indol-1-yl)-4-(1-(3-<br>(dimethylamino)propyl)-1H-indol-3-yl)-1H-pyrrole-2,5-dione                      | (CH <sub>3</sub> ) <sub>2</sub> N        |
| 139           | 3-(1-(3-<br>(dimethylamino)propyl)-1H-<br>indol-3-yl)-4-(2-methyl-1H-<br>indol-1-yl)-1H-pyrrole-2,5-<br>dione               | (CH <sub>3</sub> ) <sub>z</sub> N        |
| 140           | 3-(1H-benzo[d]imidazol-1-<br>yl)-4-(1-(3-<br>(dimethylamino)propyl)-1H-<br>indol-3-yl)-1H-pyrrole-2,5-<br>dione             | (CH <sub>3</sub> ) <sub>2</sub> N        |
| 141           | 3-(5-(benzyloxy)-1-(3-<br>(dimethylamino)propyl)-1H-<br>indol-3-yl)-4-(3-methyl-1H-<br>indol-1-yl)-1H-pyrrole-2,5-<br>dione | Ph O N O N O O N O O N O O O O O O O O O |
| 142           | 3-(1-(3-<br>(dimethylamino)propyl)-1H-<br>indol-3-yl)-4-(1H-pyrrolo[2,3-<br>b]pyridin-1-yl)-1H-pyrrole-<br>2,5-dione        | (CH <sub>3</sub> ) <sub>2</sub> N        |

| IUPAC name  | Compound structure    |
|---|-----------------------|
| TOPAC name  | Compound structure    |
| -(4-(1H-indol-1-yl)-2,5-<br>o-2,5-dihydro-1H-pyrrol-<br>l-1H-indol-1-yl)propyl<br>amimidothioate            |                       |
|   | H <sub>2</sub> N NH   |
| -(4-(3-methyl-1H-indol-1-<br>,5-dioxo-2,5-dihydro-1H-<br>ol-3-yl)-1H-indol-1-<br>opyl carbamimidothioate    |                       |
|   | S<br>H <sub>2</sub> N |
| (4-(5-(benzyloxy)-1H-<br>-1-yl)-2,5-dioxo-2,5-<br>dro-1H-pyrrol-3-yl)-1H-<br>-1-yl)propyl<br>amimidothioate | O Ph                  |
|   | H <sub>2</sub> N NH   |
| (4-(1H-indol-1-yl)-2,5-<br>o-2,5-dihydro-1H-pyrrol-<br>5-(benzyloxy)-1H-indol-<br>oropyl<br>amimidothioate  | Ph O NH               |
| ım  | nimidothioate         |

| Compound<br>number | IUPAC name   | Compound structure                                   |
|--------------------|--|--|
| 149                | 3-(5-(benzyloxy)-3-(4-(7-methyl-1H-indol-1-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl)-1H-indol-1-yl)propyl carbamimidothioate         | Ph O N   |
|                    |  | H <sub>2</sub> N NH                                  |
| 150                | 3-(5-(benzyloxy)-3-(4-(2-methyl-1H-indol-1-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl)-1H-indol-1-yl)propyl carbamimidothioate         | Ph O NH  |
| 151                | 3-(3-(4-(2-methyl-1H-indol-1-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl)-1H-indol-1-yl)propyl carbamimidothioate                       | H <sub>2</sub> N N N N N N N N N N N N N N N N N N N |
| 152                | 3-(3-(2,5-dioxo-4-(1H-<br>pyrrolo[2,3-b]pyridin-1-yl)-<br>2,5-dihydro-1H-pyrrol-3-yl)-<br>1H-indol-1-yl)propyl<br>carbamimidothioate | H <sub>2</sub> N NH                                  |

| Compound | IUPAC name   |                                       |
|----------|--|---------------------------------------|
| пиmber   |  | Compound structure                    |
| 153      | 3-(3-(4-(1H-indol-1-yl)-2,5-dioxo-2,5-dihydro-1H-pymol-3-yl)-5-methoxy-1H-indol-1-yl)propyl carbamimidothioate             | o Ho                                  |
|          |  | H <sub>2</sub> N NH                   |
| 154      | 3-(3-(4-(1H-indol-1-yl)-2,5-<br>dioxo-2,5-dihydro-1H-pyrrol-<br>3-yl)-5-fluoro-1H-indol-1-<br>yl)propyl carbamimidothioate |                                       |
| 455      |  | H <sub>2</sub> N NH                   |
| 155      | 3-(3-(4-(5-fluoro-1H-indol-1-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl)-1H-indol-1-yl)propyl carbamimidothioate             | H <sub>2</sub> N NH                   |
| 156      | 3-(1-(3-(4,5-dihydro-1H-<br>imidazol-2-ylthio)propyl)-1H-<br>indol-3-yl)-4-(1H-indol-1-yl)-<br>1H-pyrrole-2,5-dione        | N N N N N N N N N N N N N N N N N N N |

| Compound | IUPAC name   | Company                                 |
|----------|--|---|
| number   | IUFAC Name   | Compound structure                      |
| 159      | 3-(3-(4-(indolin-1-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl)-1H-indol-1-yl)propyl carbamimidothioate                       | O N N O N N N N N N N N N N N N N N N N |
| 160      | 3-(3-(4-(1H-indol-1-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl)-5-(phenylthiomethyl)-1H-indol-1-yl)propyl carbamimidothioate | Ph. S NH                                |
| 161      | 3-(1-(3-azidopropyt)-1H-<br>indol-3-yl)-4-(1H-indol-1-yl)-<br>1H-pyrrole-2,5-dione   | O H N O N O N O N O N O N O N O N O N O |
| 162      | 3-(1-(3-aminopropyl)-1H-<br>indol-3-yl)-4-(1H-indol-1-yl)-<br>1H-pyrrole-2,5-dione   | O HO<br>N<br>H <sub>2</sub> N           |

| Compound number | IUPAC name   | Compound structure |
|-----------------|--|--------------------|
| 163             | 3-(3-(3-hydroxypropyl)-1H-<br>indol-1-yl)-4-(1H-indol-3-yl)-<br>1H-pyrrole-2,5-dione                             | OH OH              |
| 164             | 3-(3-(3-hydroxypropyl)-1H-<br>indol-1-yl)-4-(1-methyl-1H-<br>indol-3-yl)-1H-pyrrole-2,5-<br>dione                | OH NO              |
| 165             | 3-(5-(benzyloxy)-1H-indol-3-<br>yl)-4-(3-(3-hydroxypropyl)-<br>1H-indol-1-yl)-1H-pyrrole-<br>2,5-dione           | Ph O H             |
| 166             | 3-(1-(4-(1H-indol-3-yl)-2,5-<br>dioxo-2,5-dihydro-1H-pyrrol-<br>3-yl)-1H-indol-3-yl)propyl<br>carbamimidothioate | HN NH <sub>2</sub> |
| 167             | 3-(1-(4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl)-1H-indol-3-yl)propyl carbamimidothioate   | NH <sub>2</sub>    |

| Company         | 111040  |   |
|-----------------|---|---|
| Compound number | IUPAC name  | Compound structure                      |
| 168             | 3-(1-(4-(5-(benzyloxy)-1-methyl-1H-indol-3-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl)-1H-indol-3-yl)propyl carbamimidothioate  | Ph O N N NH2                            |
| 169             | 3-(3-(3-<br>(dimethylamino)propyl)-1H-<br>indol-1-yl)-4-(1-methyl-1H-<br>indol-3-yl)-1H-pyrrole-2,5-<br>dione                 | O H O N (CH <sub>3</sub> ) <sub>2</sub> |
| 170             | 3-(3-(4,5-dihydro-1H-<br>imidazol-2-ylthio)propyl)-1H-<br>indol-1-yl)-4-(1-methyl-1H-<br>indol-3-yl)-1H-pyrrole-2,5-<br>dione | N N N N N N N N N N N N N N N N N N N   |
| 171             | 3-(3-azidopropyl)-1H-<br>indol-1-yl)-4-(1-methyl-1H-<br>indol-3-yl)-1H-pyrrole-2,5-<br>dione                                  | O N N O N S                             |

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| Compound number | IUPAC name  | Compound structure |
|-----------------|---|--------------------|
| 172             | 3-(3-(3-aminopropyl)-1H-<br>indol-1-yl)-4-(1-methyl-1H-<br>indol-3-yl)-1H-pyrrole-2,5-<br>dione | NH <sub>2</sub>    |

### **Attorney Docket Number**

Please note that the attorney docket number for this case has changed. The new docket number is **L80003396US2**. it is respectfully requested that this number be used on all future correspondence in connection with this application.

If any further extension of time is necessary, the United States Patent and Trademark Office is hereby petitioned for such an extension and may charge any necessary fees to our <u>Deposit Account</u> no. 50-4067.

If any further fee, **whatsoever**, with respect to the present application is due, the United States Patent and Trademark Office is in any event hereby authorized to charge such further amount to our <u>Deposit Account no. 50-4067</u>.

In light of the foregoing amendments and comments, favourable reconsideration is respectfully requested.

Respectfully submitted,

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